## In the claims:

- 1. (withdrawn) A composition for electroless plating of copper on a substrate, comprising copper complexing agent for  $Cu^{++}$  ions, a complexing agent for  $Cu^{+}$ ions, a reducing agent capable of reducing copper ions to metallic copper and hydroxide ions to a pH of at least 10.
- 2. (withdrawn) A composition for electroless plating of copper on a substrate, comprising copper ions, a mixture of complexing agents for Cu<sup>++</sup> ions, a mixture complexing agents for Cu<sup>+</sup> ions, a reducing agent capable of reducing copper ions to metallic copper and hydroxide ions to a pH of at least 10.
- (withdrawn) A composition according to claim 1, wherein 3. said agent that forms a complex with Cu++ ions is selected from a group consisting of EDTA, Quadrol and mixtures thereof.
- (withdrawn) A composition according to claim 1, wherein said agent that forms a complex with Cu<sup>+</sup> ions is selected from a group consisting of derivatives of pyridine, alkali metal cyanides, cyanates and heavy metal cyanide complexes.
- 5. (withdrawn) composition A according to claim comprising at least 10 ppm of said agent that forms a complex with Cu\* ions.

- 6. (withdrawn) A composition according to claim 4, comprising at least 20 ppm of bipyridine.
- 7. (withdrawn) A composition according to claim 1, further comprising at least one surfactant.
- (withdrawn) An improved method for electroless plating 8. copper on a substrate using an electroless composition according to claim 1.
- 9. (withdrawn) An improved method for electroless plating of copper on a substrate using an electroless composition according to claim 2.
- 10. (withdrawn) A method according to claim 8, further comprising heating the substrate to a temperature above the operating temperature of the electroless plating bath.
- 11. (withdrawn) A method according to claim 10, wherein at least part of the surface of said substrate is nonmetallic.
- (withdrawn) A method according to claim 8, wherein the 12. substrate is flat.
- 13. (withdrawn) A method according to claim 9, wherein the substrate is flat.
- 14. (withdrawn) A method according to claim 8, wherein the substrate is made of material selected from a group consisting of copper-clad polymer and silicon material.

- 15. (withdrawn) A method according to claim 14, wherein the substrate comprises vias and trenches.
- (withdrawn) An article manufactured by the method of 16. claim 8.
- 17. (withdrawn) An article manufactured by the method of claim 9.
- 18. (withdrawn) An article manufactured by the method of claim 10.
- 19. (withdrawn) An article manufactured by the method of claim 11.
- 20. (new) An article manufactured by an improved method for electroless plating of copper on a substrate using an electroless composition for electroless plating of copper on a substrate, said composition comprising copper ions, a complexing agent for  $Cu^{++}$  ions, a complexing agent for  $\operatorname{Cu}^{+}$  ions, and a reducing agent capable of reducing copper ions to metallic copper and hydroxide ions to a pH of at least 10.
- 21. (new) An article manufactured by an improved method for electroless plating of copper on a substrate using an electroless composition for electroless plating of copper on a substrate, comprising copper ions, a mixture of complexing agents for Cu\*\* ions, a mixture of complexing agents for Cu<sup>+</sup> ions, and a reducing agent capable of

reducing copper ions to metallic copper and hydroxide ions to a pH of at least 10.

22. (new) An article manufactured by an improved method for electroless plating of copper on a substrate using an electroless composition for electroless plating of copper on a substrate, said composition comprising copper ions, a complexing agent for  $Cu^{++}$  ions, a complexing agent for Cu\* ions, and a reducing agent capable of reducing copper ions to metallic copper and hydroxide ions to a pH of at least 10,

wherein said method further comprises heating the substrate to temperature above the temperature of the electroless plating bath.

23. (new) The article of claim 22, wherein at least part of the surface of said substrate is non-metallic.